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EXAMINER	
HOANG, ANN THI	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/645,027	Applicant(s) KHORRAM, SHAHLA	
	Examiner Ann T. Hoang	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 2, line 23, "...amplifies then" should be changed to "...amplifies them."

On page 3, line 11, "...the grounds and coupled together" should be changed to "...the grounds are coupled together."

On page 8, lines 29-30 and page 9, lines 1-2, it is inconsistent with the drawings that the receiver filter module 71 converts the inbound RF signals 88 into an inbound low IF signal 90. To be consistent with the drawings, the disclosure should be corrected to indicate that the receiver filter module 71 sends inbound RF signal 88 to the analog receive section 70 and that analog receive section 70 converts the inbound RF signals 88 into an inbound low IF signal 90.

On page 9, both lines 6 and 7, "transmit ground 86" should be changed to "receive ground 84."

On page 9, line 29, "to resonant" should be changed to "to be resonant."

On page 11, "is coupled" should be changed to "are coupled."

On page 11, line 30, "The ground and of the supply voltage connections..." should be changed to "The ground and the supply voltage connections..."

On page 13, line 12, the analog transmit section should be referenced with the number 76 to be consistent with the drawings.

On page 14, line 5, a local oscillation module 74 is disclosed as part of Fig. 8. However, Fig. 8 does not show this element.

Appropriate correction is required.

Claim Objections

2. The claims following claim 18 have been misnumbered, as claim 18 appears twice. Second claim 18 and claim 19 following second claim 18 have been respectively renumbered 19 and 20 and are referred to accordingly for the purpose of this action.

3. Claims 5 and 20 objected to because of the following informalities: On page 18, line 14 and page 27, line 24 of the claims, "receive ground connection" should be changed to "receive filtering ground connection" to be consistent with the drawings and claim language. Appropriate correction is required.

4. Claims 12 and 19 are objected to because of the following informalities: Line 21 of page 22 and line 12 of page 26 should be changed to "the power amplifier including second power amplifier ESD protection circuitry..." Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woo et al. (US 6,445,039) in view of Kluge et al. (US 2003/0183403).

Regarding claim 1, Woo et al. discloses a radio frequency integrated circuit (RFIC) having sectional electrostatic discharge (ESD) protection, the RFIC comprising: an analog receive section 3402 operably coupled to convert inbound radio frequency

(RF) signals 3410 into inbound low intermediate frequency (IF) signals 3412, and a digital section 3416 operably coupled to convert the inbound low IF signals 3412 into inbound digital baseband signals 3414. Fig. 34 and column 39, lines 40-45 describe these elements with their numerical references. Woo et al. discloses in column 39, lines 57-63 that the RFIC may also contain an analog transmit section, which would be operably coupled to convert outbound low IF signals into outbound RF signals, to compliment analog receive section 3402, thereby making the RFIC a transceiver system. A transceiver 5818 is depicted in Fig. 58. For two-way transmission, digital section 3416 would necessarily convert outbound digital baseband signals into the outbound low IF signals as well. See column 58, lines 42-52 and column 61, lines 62-67. Woo et al. discloses RFIC sections (6102, 6104, 6106) to have localized ground connections (6110, 6112, 6114) as well as localized ESD protection circuitry 6108, with each local ESD protection circuit operably coupled to its respective local ground connection. See Fig. 61; column 2, lines 3-9; column 63, lines 14-19 and 60-67; and line 64, lines 1-18. Thus, it is understood that analog receive section 3402 has an analog receive ground connection, wherein analog receive section 3402 includes analog receive ESD protection circuitry operably coupled to the analog receive ground connection; that the analog transmit section has an analog transmit ground connection, wherein the analog transmit section includes analog transmit ESD protection circuitry operably coupled to the analog transmit ground connection; and that digital section 3416 has a digital ground connection. Woo et al. discloses parasitic capacitance to be a problem of concern when different RFIC sections are placed on separate power and

ground lines, but does not disclose a first inductor assembly operably coupling the analog receive ground connection to the digital ground connection or a second inductor assembly operably coupling the analog transmit ground connection to the digital ground connection.

However, Kluge et al. discloses a parasitic capacitance 206 formed between and input terminal 203 and a ground terminal 204 in an RFIC having ESD protection, as well as the method of inserting an inductor 205 between the terminals in order to form a resonance tank with parasitic capacitance 206. See Fig. 2a and page 3, paragraph 26. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the analog receive ground connection and the digital ground connection, as well as between the analog transmit ground connection and the digital ground connection. The resonance tank would be designed to have a resonant frequency in accordance with operating radio frequency of the integrated circuit. Specifically, the inductance value would be chosen so that, under normal operation (high frequencies) of the RFIC, the inductor would act as an open circuit and compensate for the parasitic capacitance. During ESD events (low frequencies), the inductor would act as a short, tying the grounds together to provide a common shunt for the ESD.

Regarding claim 2, Woo et al. discloses the desire to fabricate all blocks of the transceiver on a single die, as partitioning more and more functionality into a single

integrated circuit chip allows for considerable savings in component parts costs. See column 17, lines 59-62. This entails fabricating the analog receive section, the analog transmit section, and the digital section on a single die. Kluge et al. discloses fabricating the components of the RFIC on a single die, but that, in an application involving relatively large sized inductors, inductor 3 can be manufactured off-chip. See page 4, paragraph 37. It would have been obvious to one of ordinary skill in the art at the time of the invention to manufacture the first and second inductor assemblies off-chip with respect to the single die in order to not add the bulk of large inductors to the single die.

Regarding claim 3, Kluge et al. discloses that inductor 3 may be packaged within the same package housing the single die. See page 4, paragraph 37. It would have been obvious to one of ordinary skill in the art at the time of the invention to package the first and second inductor assemblies within the same package housing the single die in order to contain the RFIC in a single package.

Regarding claim 4, Woo et al. discloses multiple RFIC sections (6102, 6104, 6106). These sections are labeled for the purpose of an example drawing, the function of each unspecified, and it is understood that any number of RFIC sections may be utilized. See Fig. 61 and column 64, lines 16-18. Woo et al. shows RFIC sections (6102, 6104, 6106) to each have a second ESD protection circuit operably coupled to a localized power source connection (6110, 6112, 6114). The multiple RFIC sections (6102, 6104, 6106) are interpreted to include analog receive section 3402, the analog transmit section, and digital section 3416. Thus, analog receive section 3402 includes

second analog receive ESD protection circuitry operably coupled to an analog receive power source connection; the analog transmit section includes second analog transmit ESD protection circuitry operably coupled to an analog transmit power source connection; and digital 3416 section includes a digital power source connection. Woo et al. does not disclose a third inductor assembly operably coupling the analog receive power source connection to the digital power source connection or a fourth inductor assembly operably coupling the analog transmit power source connection to the digital power source connection.

However, Kluge et al. discloses the method of inserting an inductor 205 between two terminals 203 and 204 to form a resonance tank with a parasitic capacitance 206 existing between the terminals. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the analog receive power source connection and the digital power source connection, as well as between the analog transmit power source connection and the digital power source connection. See the above rejection on claim 1.

Regarding claim 5, Woo et al. discloses a low noise amplifier 3502 operably coupled to amplify the inbound RF signals 3406 to produce amplifier inbound RF signals 3410; a mixing module 1916 operably coupled to mix amplified inbound RF signals 3410 with a receive local oscillation 1902 to produce down converted signals 1918; and a receive filtering module 1912 operably coupled to filter down converted signals 1918

to produce inbound low IF signals 3412. The reference actually discloses a cascade of multiple mixers and filters which tune the received signal before signal processing circuitry splits the analog component off of the inbound low IF signal and outputs it in a digital format. From this, it is understood that the signal processing circuitry includes an analog to digital converter with an analog portion, as would be required for this type of splitting. See abstract; Figs. 19, 34, and 35; column 60, lines 66-67 and column 61, lines 1-7. Some of these components are shown as connecting to but not within the block that represents analog receive section 3402 in the drawings. However, it would be obvious to one of ordinary skill in the art at the time of the invention to diagram them as being a part of analog receive section 3402, as they perform the same functions irregardless of their grouping in the drawings. Since Woo et al. discloses an unlimited number of RFIC sections (6102, 6104, 6106) to have localized ground connections (6110, 6112, 6114) (see Fig. 61), it is interpreted that low noise amplifier 3502, mixing module 1916, receive filtering module 1912, and the analog portion of the analog to digital converter constitute RFIC sections and that these RFIC sections each have a localized ground connection. Thus, low noise amplifier 3502 has a low noise amplifier ground connection, mixing module 1916 has a mixing module ground connection, receive filtering module 1912 has a receive filtering ground connection, and the analog portion has an analog portion ground connection. Woo et al. discloses parasitic capacitance to be a problem of concern when different RFIC sections are placed on separate power and ground lines, but does not disclose any inductors operably coupling the aforementioned ground connections.

However, Kluge et al. discloses a parasitic capacitance 206 formed between and input terminal 203 and a ground terminal 204 in an RFIC having ESD protection, as well as the method of inserting an inductor 205 between the terminals in order to form a resonance tank with parasitic capacitance 206. See Fig. 2a and page 3, paragraph 26. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits in the form of a first inductor operably coupling the low noise amplifier ground connection to the mixing module ground connection, a second inductor operably coupling the mixing module ground connection to the receive filtering ground connection, a third inductor operably coupling the receive filtering ground connection to the analog portion ground connection, and a fourth inductor operably coupling the analog portion ground connection to the digital ground connection. See above rejection on claim 1.

Regarding claim 6, Woo et al. discloses in column 39, lines 57-63 an analog transmit section with functionally equivalent circuitry as the analog receive section. It is understood that transceiver 5818, depicted in Fig. 58, comprises a power amplifier operably coupled to amplify up converted signals to produce the outbound RF signals, a mixing module operably coupled to mix filtered low IF signals with a transmit local oscillation to produce the up converted signals, a filtering module operably coupled to filter the outbound low IF signals to produce the filtered low IF signals, and an analog portion of a digital to analog converter which converts digital outbound low IF signals

into the outbound low IF signals, as these components would be the compliment of those in the analog receive section as described above. These components are interpreted to constitute some of the RFIC sections (6102, 6104, 6106) with localized ground connections (6110, 6112, 6114). Woo does not disclose any inductors operably coupling the aforementioned ground connections.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the localized ground connections. Claim 6 is rejected under the same reasoning as that of claim 5. See above rejection.

Regarding claim 7, Woo et al. discloses a low noise amplifier 3502 operably coupled to amplify inbound RF signals 3406 to produce amplifier inbound RF signals 3410 and an analog receive radio section (Fig. 19) operably coupled to convert amplified inbound RF signals 3410 into inbound low IF signals 3412. These sections are interpreted to constitute some of the RFIC sections (6102, 6104, 6106) with localized ground connections (6110, 6112, 6114). Some of these components are shown as connecting to but not within the block that represents analog receive section 3402 in the drawings. However, it would be obvious to one of ordinary skill in the art at the time of the invention to diagram them as being a part of analog receive section 3402, as they perform the same functions irregardless of their grouping in the drawings.

Woo does not disclose any inductors operably coupling the aforementioned ground connections.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the localized ground connections. Claim 7 is rejected under the same reasoning as that of claim 5. See above rejection.

Regarding claim 8, transceiver 5818, depicted in Fig. 58, comprises a power amplifier operably coupled to amplify up converted signals to produce the outbound RF signals and an analog transmit radio section operably coupled to produce the up converted signals from the outbound low IF signals, as these components would be the compliment of those in the analog receive section as described above. These components are interpreted to constitute some of the RFIC sections (6102, 6104, 6106) with localized ground connections (6110, 6112, 6114). Woo does not disclose any inductors operably coupling the aforementioned ground connections.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the localized ground connections. Claim 8 is rejected under the same reasoning as that of claim 6. See above rejection.

Regarding claim 9, Woo et al. discloses a radio frequency integrated circuit (RFIC) having sectional electrostatic discharge (ESD) protection, the RFIC comprising: an analog receive section 3402 operably coupled to convert inbound radio frequency (RF) signals 3410 into inbound low intermediate frequency (IF) signals 3412; a power amplifier operably coupled to amplify up converted signals to produce the outbound RF signals (see Fig. 58); an analog transmit radio section (see Fig. 58) operably coupled to produce the up converted signals from the outbound low IF signals, as this section would be the compliment of the analog receive section as described above; and a digital section 3416 operably coupled to convert inbound low IF signals 3412 into inbound digital baseband signals 3414 and to necessarily convert outbound digital baseband signals into the outbound low IF signals. See Fig. 34. These components are interpreted to constitute some of the RFIC sections (6102, 6104, 6106) with localized ground connections (6110, 6112, 6114). Woo et al. discloses RFIC sections (6102, 6104, 6106) to also include localized ESD protection circuitry 6108, with each local ESD protection circuit operably coupled to its respective local ground connection. See Fig. 61; column 2, lines 3-9; column 63, lines 14-19 and 60-67; and line 64, lines 1-18. Thus, it is understood that analog receive section 3402 has analog receive ESD protection circuitry 6108 operably coupled to the analog receive ground connection. Woo does not disclose any inductors operably coupling the aforementioned ground connections.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals

having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the localized ground connections. Claim 9 is rejected under the same reasoning as that of claim 1. See above rejection.

Claim 10 is rejected under the same reasoning as that of claim 2. See above rejection.

Claim 11 is rejected under the same reasoning as that of claim 3. See above rejection.

Regarding claim 12, Woo et al. shows RFIC sections (6102, 6104, 6106) to each have a second ESD protection circuit operably coupled to a localized power source connection (6110, 6112, 6114). The multiple RFIC sections (6102, 6104, 6106) are interpreted to include analog receive section 3402, the power amplifier (see Fig. 58), and digital section 3416. Thus, analog receive section 3402 includes second analog receive ESD protection circuitry operably coupled to an analog receive power source connection; the power amplifier includes second power amplifier ESD protection circuitry operably coupled to a power amplifier power source connection; and digital 3416 section includes a digital power source connection. Woo does not disclose any inductors operably coupling the aforementioned power source connections.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the localized power source

connections. Claim 12 is rejected under the same reasoning as that of claim 4. See above rejection.

Claim 13 is rejected under the same reasoning as that of claim 5. See above rejection.

Claim 14 is rejected under the same reasoning as that of claim 6. See above rejection. The "analog transmit radio section" of claim 9 is understood to be essentially the same as the "analog transmit section" of claim 1.

Claim 15 is rejected under the same reasoning as that of claim 7. See above rejection.

Regarding claim 16, Woo et al. discloses a radio frequency integrated circuit (RFIC) having sectional electrostatic discharge (ESD) protection, the RFIC comprising: a power amplifier operably coupled to amplify up converted signals to produce the outbound RF signals, an analog radio section 5818 operably coupled to convert inbound RF signals 3506 into inbound low IF signals 3412 and operably coupled to produce the up converted signals from outbound low IF signals, and a digital section 3416 operably coupled to convert inbound low IF signals 3412 into inbound digital baseband signals 3414 and to convert outbound digital baseband signals into the outbound low IF signals. See Figs. 34, 35, and 58; column 58, lines 42-52 and column 61, lines 62-67. These sections are interpreted to constitute some of the RFIC sections (6102, 6104, 6106) with localized ground connections (6110, 6112, 6114) and localized ESD protection circuitry 6108, with each local ESD protection circuit operably coupled to its respective local

ground connection. See Fig. 61. Woo does not disclose any inductors operably coupling the aforementioned ground connections.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the localized ground connections. Claim 16 is rejected under the same reasoning as that of claim 1. See above rejection.

Claim 17 is rejected under the same reasoning as that of claim 2. See above rejection.

Claim 18 is rejected under the same reasoning as that of claim 3. See above rejection.

Claim 19 is rejected under the same reasoning as that of claim 12. See above rejection. The "analog radio section" of claim 19 is understood to be a two-way transceiver equivalent of the "analog receive section" of claim 12.

Regarding claim 20, Woo et al. discloses analog radio section 5818 to comprise: a low noise amplifier 3502 operably coupled to amplify inbound RF signals 3406 to produce amplifier inbound RF signals 3410, a receive mixing module 1916 operably coupled to mix amplified inbound RF signals 3410 with a receive local oscillation 1902 to produce down converted signals 1918, and a receive filtering module 1912 operably coupled to filter down converted signals 1918 to produce inbound low IF signals 3412. It is understood that the signal processing circuitry includes an ADC analog portion of

an analog to digital converter, as would be required for splitting the analog component off of the inbound low IF signal and outputting it in a digital format. See above rejection on claim 5. Since Woo et al. discloses analog radio section 5818 to contain an analog transmit section to compliment analog receive section 3402, it is understood that analog radio section 5818 also comprises: a transmit mixing module operably coupled to mix filtered low IF signals with a transmit local oscillation to produce the up converted signals; a transmit filtering module operably coupled to filter the outbound low IF signals to produce the filtered low IF signals; and a DAC analog portion of a digital to analog converter, wherein the digital to analog converter converts digital outbound low IF signals into the outbound low IF signals, as these components would be the compliment of those in the analog receive section as described above. These components are interpreted to constitute some of the RFIC sections (6102, 6104, 6106) with localized ground connections (6110, 6112, 6114). Woo does not disclose any inductors operably coupling the aforementioned ground connections.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of inserting an inductor between two terminals having a parasitic capacitance in between, as taught by Kluge et al., with the RFIC of Woo et al. in order to form resonance circuits between the localized ground connections. Claim 20 is rejected under the same reasoning as that of claim 1. See above rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johnson (US 6,624,999 and US 2003/0058591) teaches coupling an inductor between the output of a high frequency circuit and an ESD circuit, wherein the inductor acts as an open circuit and removes a capacitive load of the ESD circuit from the output terminal during normal operation, and wherein the inductor acts as a short circuit, couples the ESD event to the power supply line, and provides a current path to ground during an ESD event. Nazarian et al. teaches a device with transmitter and receiver sections containing filters, amplifiers, mixers, and A/D and D/A converters, as well as the method of utilizing separate power supplies and ground planes for the different sections of the circuitry.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann T. Hoang, whose telephone number is 571-272-2724. The examiner can normally be reached Mondays through Fridays, 8:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached at 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ATH

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PRIMARY EXAMINER